

# Compact cylinder ADN-S-50-45-A-P-A-F1A

Part number: 8142915

FESTO



 [General operating condition](#)

## Data sheet

| Feature   | Value  |
|---|--|
| Stroke  | 45 mm  |
| Piston diameter   | 50 mm  |
| Cushioning  | Elastic cushioning rings/pads at both ends                         |
| Mounting position   | Any  |
| Mode of operation   | Double-acting  |
| Piston rod end  | External thread  |
| Structural design   | Piston<br>Piston rod   |
| Position sensing  | Via proximity switch   |
| Symbol  | 00991217   |
| Variants  | Piston rod at one end  |
| Operating pressure  | 0.04 MPa ... 1 MPa   |
| Operating pressure  | 0.4 bar ... 10 bar   |
| Operating pressure  | 5.8 psi ... 145 psi  |
| Operating medium  | Compressed air as per ISO 8573-1:2010 [7:4:4]                      |
| Information on operating and pilot media                  | Operation with oil lubrication possible (required for further use) |
| Corrosion resistance class (CRC)                          | 0 - No corrosion stress  |
| LABS (PWIS) conformity                                    | VDMA24364-B2-L   |
| Suitability for the production of Li-ion batteries        | Suitable for battery production with reduced Cu/Zn/Ni values (F1a) |
| Cleanroom suitability, measured according to ISO 14644-14 | Class 5 according to ISO 14644-1                                   |
| Ambient temperature                                       | 0 °C ... 80 °C   |
| Impact energy in the end positions                        | 1 J  |
| Theoretical force at 6 bar, retracting                    | 1057 N   |
| Theoretical force at 6 bar, advancing                     | 1178 N   |
| Moving mass at 0 mm stroke                                | 104 g  |
| Additional moving mass per 10 mm stroke                   | 16 g   |
| Basic weight with 0 mm stroke                             | 324 g  |
| Additional weight per 10 mm stroke                        | 63 g   |
| Type of mounting  | With through-hole<br>With internal thread                          |
| Pneumatic connection                                      | G1/8   |
| Note on materials   | RoHS compliant   |
| Cover material  | Wrought aluminum alloy, anodized                                   |
| Material of dynamic seals                                 | TPE-U(PU)  |
| Housing material  | Wrought aluminum alloy, anodized                                   |
| Piston rod material                                       | high-alloy stainless steel   |